The investigation of this sharply defined strychnine-compound, which can be preserved for months without undergoing any decomposition, goes far to prove the existence of a persulphide of hydrogen,

$$H_2S_3;$$

it is, however, by no means improbable that compounds of hydrogen and sulphur in several proportions may exist.

The formation of the strychnine-compound which I have described, and which I have often prepared with the same result, could not fail to lead to an examination of several other alkaloids in a similar direction. Quinine, cinchonine, brucine, and several other vegetal bases were repeatedly submitted to the action of an alcoholic solution of polysulphide of ammonium, but in no case were similar phenomena observed.

The compound of strychnine with persulphide of hydrogen is remarkable for its insolubility. An alcoholic solution containing 2·03 grs. of strychnine, when mixed with an alcoholic solution of polysulphide of ammonium and allowed to stand for twelve hours, was found to have deposited 2·287 grs. of the red crystals, *i. e.* 87·2 per cent. of the theoretical amount. It deserves to be examined, whether the property possessed by strychnine, of forming so insoluble a compound with persulphide of hydrogen, could not be utilized for the purpose of preparing this alkaloid, and in certain cases even for its detection and separation from other substances with which it might be mixed.

II. "Note on the Anatomy of the Blood-vessel System of the Retina of the Hedgehog." By J. W. Hulke, F.R.S. Received May 26, 1868.

(Abstract.)

This retina is very remarkable for the fact that all the arteries and veins lie upon the inner surface of the membrana limitans interna retinæ, in intimate relation with the membrana hyaloidea; while capillaries only traverse the limitans, receiving a sheath from it, and penetrate the inner layers of the retina. The hedgehog's retina is in this respect a link between the non-vascular retina of fish, amphibia, reptiles and birds, and the vascular retinæ of most mammals.

III. "Researches on Refraction-Equivalents." By J. H. Gladstone, Ph.D., F.R.S. Received May 29, 1868.

Since the paper of the Rev. T. Pelham Dale and myself "On the Refraction, Dispersion, and Sensitiveness of Liquids"*, our researches have been continued from time to time, and a good deal of attention has been paid to the subject in Germany. The permanence of the specific refractive

* Philosophical Transactions, 1863, p. 317.